REMARKS

Reconsideration of this application is requested. Claims 63, 64, 66 and 71 are active in the application subsequent to entry of this Amendment.

Claims 65 and 67-70 have been withdrawn in order to reduce issues while claim 71 has been amended for purposes of clarity.

An Information Disclosure Statement was filed on June 3, 2002 drawing to the examiner's attention five U.S. patents. The relevant processing fee was paid as well. However, the Official Action, mailed August 14, 2002 includes no mention or initialed and dated PTO-1449 related to the IDS filed June 3, 2002 – even though the Official Action was mailed some two months later than the filing of the IDS.

In the event that the examiner's file is incomplete, attached is a further copy of the Information Disclosure Statement filed June 3, 2002. Also enclosed are copies of the five U.S. patents cited in that IDS. No additional fee for consideration of this IDS is required since one was already paid. Please take these documents into account during further consideration of this application.

Before addressing the issues raised in the outstanding Official Action it is important to review the content of the four claims remaining for consideration.

The device defined in claim 63 has a first p-type clad layer and an n-type layer. An active layer is provided between the first p-type clad layer and the n-type layer. A p-type contact layer is formed over the first p-type contact layer. The first p-type clad layer comprises a p-type semiconductor containing In and Ga.

The device of claim 64 also has a first p-type clad layer and an n-type layer. An active layer is provided between the first p-type clad layer and the n-type layer. A second p-type clad layer is formed over the first p-type contact layer. The first p-type clad layer comprises a p-type semiconductor containing In and Ga.

The device of claim 71 has a first p-type clad layer and a first n-type clad layer. An active layer is provided between the first p-type clad layer and the first n-type clad layer. A second p-type contact layer is formed over the first p-type clad layer. A second

n-type clad layer is formed over the first n-type clad layer. The first p-type clad layer comprises a p-type semiconductor containing In and Ga. The first n-type clad layer comprises an n-type semiconductor containing In and Ga.

Claim 66 of the present application specifies that the device of claim 71 further comprises a p-type contact layer formed over the second p-type clad layer, and an n-type contact layer formed over the second n-type clad layer.

Previous claims 63-71 have attracted a rejection of obviousness-type double patenting over claims 1-12 of U.S. Patent 5,652,434 in view of two additional references, Edmond et al U.S. 5,592,501 and Hayakawa et al U.S. 4,759,024. In addition, claims 63-65 and 67-71 have attracted a rejection of alleged "obviousness" over Edmond in view of Hayakawa while claim 66 only has attracted a similar "obviousness" rejection over Edmond and Hayakawa, as above, further in view of Chai U.S. 5,625,202. Considering the above synopsis of the claims remaining for consideration it is applicants' position that the documents cited and relied upon neither disclose nor suggest the subject matter defined by any of claims 63, 64, 66 and 71.

In the device of the invention, the active layer is of a multi-quantum well structure having a well layer comprising InGaN.

On the other hand, the device defined in clams 1-12 of U.S. Patent 5,652,434 has first and second semiconductor layers. The first layer is of an n-type, while the second layer is of a p-type. However, these first and second layers are contact layers, to which first and second electrode layers are connected, respectively, as clearly defined in claim 1 of the U.S. Patent 5,652,434. Claims 1-12 are silent about clad layers.

Edmond et al do not specifically disclose to form a first p-type clad layer with a p-type nitride semiconductor comprising In and Ga.

Only by forming a first p-type clad layer with a p-type nitride semiconductor comprising In and Ga (claims 63, 64 and 71) and in addition by forming a first n-type clad layer with a p-type nitride semiconductor comprising In and Ga (claim 71), can the effects or advantages described in the specification, page 44, line 12 to page 46, line 7 be

obtained. Such advantages of the present invention are not disclosed or suggested by Edmond et al.

Hayakawa et al only disclose a GaP/AIP semiconductor device and is irrelevant to nitride semiconductors.

Chai does not disclose or suggest the structure of the device of the present invention and advantages of the present invention as described above.

For the above reasons it is respectfully submitted that the claims of this application define inventive subject matter. Reconsideration and allowance are solicited.

Attached hereto is a marked-up version of the changes made to the claim by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made**."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

71. (Amended) A nitride semiconductor light-emitting device comprising:

a first n-type clad layer comprising an n-type nitride semiconductor containing indium and gallium;

a first p-type clad layer comprising a p-type nitride semiconductor containing indium and gallium;

an active layer provided between said first n-type and p-type clad layers and having a multi-quantum well structure including a well layer comprising a nitride semiconductor represented by $In_xGa_{1-x}N$, where $0 < x < 1$, and a barrier layer comprising a nitride semiconductor represented by $In_yGa_{1-y}N$, where $0 \leq y < 1$;

a second n-type clad layer comprising an n-type nitride semiconductor containing aluminum and gallium, said second n-type clad layer having a larger band gap than said first n-type clad layer, said [first] second n-type clad layer being provided over said [second] first n-type clad layer; and

a second p-type clad layer comprising a p-type nitride semiconductor containing aluminum and gallium, said second p-type clad layer having a larger band gap than said first p-type clad layer, and said second p-type clad layer being provided over said first p-type clad layer.